

# The Podcast as a didactic resource and learning situated in higher education

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## **Abstract**

*The purpose of this research work was to determine the influence of the Podcast as a didactic resource in the learning situated in a Peruvian university, using the quantitative approach, with a non-experimental design, using a population of 200 students who used this resource during an academic semester. Information was collected through instruments that were validated by technology experts and validity was measured with Cronbach's alpha index. The results showed that according to the perception of the students there is a significant correlation between the study variables. In general, it can be affirmed after the results obtained that the students who used the podcast as a didactic resource are those who managed to consolidate some elements of learning in a situated context.*

**Keywords:** *podcast, teaching resource, skills, higher education, learning*

## **1. Introduction**

Currently, university education systems have been impacted by the demands of the scientific, technological and social advance of the millennium. In this sense, it is essential to approach universities in depth to describe and interpret the learning processes that their students use. This research explores the possibilities offered by podcasts as teaching resources that strengthen digital skills. In this regard, Fernández, Reyes and López (2012) argued that cognitive processes require technological resources that make it possible to develop digital skills and competencies.

According to UNESCO (2018), it constitutes a challenge and a political axis for governments in the field of technological literacy. It will be reflected that the formation of digital competences in higher education requires situational learning, which prioritizes complex thinking, learning to learn, solving problems and working collaboratively based in part on the dissemination of podcasts Reynoso, Zepeda and Rodriguez (2016) affirm that podcasts serve as an effective and critical means of communication that leads students to use them in their educational processes. The current situation regarding the demands of a new educational model that integrates the needs of the environment, the new teaching-learning scenarios and the new teaching role that are essential to face what society demands (Martínez and Torres, 2017), this implies using the tools that promote the development of competences, that is, of cognitive and metacognitive.

From an educational perspective, to demonstrate that podcasts as a didactic resource allow situated learning with a focus on digital competences, improving the methodology. The research question is focused on discovering to what extent the application of podcasts are related to learning situated in the context of higher education in a Peruvian university. The objective of the research was to know the perception of podcasts as a didactic resource with the achievement of situated learning during an academic semester. For this purpose, instruments have been developed to measure the study variables.

## **2. Bibliographic review**

Among the previous works, it has been possible to find the investigations of Cadena and Alvarez (2021) that podcasts allow the generation of self-regulated behaviors and the increase in understanding, the study highlights the importance of students critically and reflectively examining their oral production to help them to communicate effectively in a globalized context. Trujillo (2011) whose purpose was to indicate that the podcast offers possibilities to build, generate and manage knowledge from collaborative work and in a network, in this way to generate educational projects for the development of courses and achieve learning. Likewise, in the work of Prado (202) whose objective was to evaluate the effect of the Podcast on the improvement of oral expression in students, The results of which indicated that a significant improvement in oral skills was achieved using the podcast as a means for developing self-criticism. This is because the student analyzes their learning process based on the activities reflected

in the audios. In this same sense, in the work of Rodríguez, Fuego and Hevia (2021) it is indicated that university teachers present digital skills that allow them to use mobile devices for the selection of digital resources and development of projects designed for innovation and improvement.

Making the most of its communication potential and access to information, this can be achieved with a podcast. Further, The research of Hernández and Navarro (2017) aimed to analyze the usefulness of the personal computer in the classroom by higher education students, using a questionnaire whose results indicated that the personal computer helped to consult the information more quickly, facilitated the work, It saved time and space, helped to take notes and consult the virtual platform, facilitating autonomy in tasks. For their part, Martínez and Torres (2017) disclosed the current situation regarding the demands of a new educational model that integrates the needs of the environment, the new teaching-learning scenarios and the new teaching role that are essential to face what the society, for this purpose they applied a "focus group".

In relation to the podcast, it is defined by UNESCO (2016), it is a didactic medium that consists of a digital audio file with educational content created by teachers, students, companies, between others with a didactic purpose. In reference to educational podcasts, they are means of communication, which develop the communication skills of the student. According to Reynoso, Maldonado and Zepeda (2016), understanding the pedagogical scope and the variants of the podcast allows to understand the processes of construction of significant learning by part of the students.

It is in this context, there are teachers who use podcasts as didactic resources to share learning experiences, manage projects, information on resources to carry out tasks and activities and thus to promote learning spaces in red. In the field of education, podcasts have gained some popularity and are gradually being used to promote learning through ICTs (Chawinga, 2017). Reynoso, Zepeda and Rodríguez (2019) indicate that podcasts must go through phases, which are: (a) Planning, which will generate delimiting the end or purpose, the content and the scope that is expected to be obtained, delimiting the needs, learning objectives, resources, knowing responsibilities and the establishment of time limits. (b) Analysis, here learning achievements are reviewed; student profile, podcast prototype selection; selection of the type of educational podcast and how it will be distributed. (c) Design, where the content is reviewed and the way in which the recording of the educational podcast will be executed. (d) Development, includes recording, and music. Currently, skills training requires professional practice to be accompanied by various technological tools to achieve this. In this way, communication and interaction possibilities are expanded, as well as the use and management of information or data processing.

Situational learning is that cognitive and behavioral process that prioritizes training in competencies, highlights the development of complex thinking, ability to learn to learn, the ability to solve real problems in a way. In situated learning, the construction of knowledge has a high dependence on individual and social cognitive interaction, so that both the internalization and the transfer of knowledge occur at the behest of social interaction, therefore, the individual learns in the context that he is situated and in function of himself. To achieve situated learning, there are ways to measure it as postulated by López (2014):

- Dimension of educational services, refers to the innovative training possibilities that promote the development of new skills throughout people's lives thanks to technology (e-learning) that has allowed new educational scenarios in universities through of online courses.
- Dimension of accompaniment, means that through podcast, support for community work, professional practices, tutorials in the use of technology with educational applications and generation of communities of practice can be achieved.
- Dimension of training, new training and support environments have been created, ways of dissemination and transmission of knowledge, new ways of building knowledge also appear, as well as strategies for linking teachers, students and researchers, which develop diversified forms of cooperative work in network.
- Dimension of research and development, which requires that the educator not only promote learning processes, but also the search for the best technological tools to support the educational act, face-to-face or virtual.
- Dimension of social inclusion, through situated learning it is sought to generate a new social environment that offers the possibility of expanding the scope of the institutions; particularly vulnerable groups with high rates of marginalization.

The research is justified because podcasts and situated learning are fundamental for both students, teachers, academic groups and researchers, since progressively better learning results will be obtained as a valuable means of communication by building a means of identity between teachers and students, as a form of communication inside and outside the classroom, providing a voice and a space for expression. (Borges, 2009).

### 3. Methodology

A research of a quantitative, applied nature was used, seeking to contribute to the development of scientific knowledge at a descriptive-correlational level, in accordance with Hernández et al. (2014). Likewise, the study variables have not been manipulated, so it is non-experimental. The research sample was made up of 200 students from a Peruvian university, the survey was used as a technique. the instrument was the questionnaire, using the Likert scale.

The correlation between the variables podcast and situated learning of was determined using Pearson's correlation coefficient, which expresses the degree of association or affinity between the variables considered.

### 4. Results

The state of the relationship between the podcast and situated learning was analyzed in a representative sample of two hundred students, who answered surveys pertaining to the variable (X) "podcast" and the variable (Y) "Situated learning". The

statistical treatment It was carried out with the use of the SPSS version 25 program and the Microsoft Excel 2013 program for Windows.

It was obtained by means of a Pearson Correlation Coefficient (r) indicates a considerable positive direct association or relationship between the variable (X) Podcast and the variable (Y) Situated learning . The variable situated learning has been operationalized based on what proposed by López (2014) that considers five dimensions: educational services, accompaniment ,research and development and social inclusion. Each dimension is made up of indicators that have been measured through reagents.

Table N ° 02 presents the results of the variable (X) Podcast and each dimension of the Variable (Y) Situated Learning

	<b>Podcast and Research /Development</b>	<b>Podcast and Social Inclusion</b>	<b>Podcast y Educational Services</b>	<b>Podcast and Accompaniment</b>
<b>MEDIA X</b>	<b>2.13</b>	<b>1.24</b>	<b>0.33</b>	<b>3.7</b>
<b>MEDIA Y</b>	<b>6.29</b>	<b>6.29</b>	<b>6.29</b>	<b>6.29</b>
<b>DESVIACION TIPICA DE X</b>	<b>1.422357198</b>	<b>1.712425181</b>	<b>0.762299154</b>	<b>2.651414717</b>
<b>DESVIACION TIPICA DE Y</b>	<b>1.51191931</b>	<b>1.51191931</b>	<b>1.51191931</b>	<b>1.51191931</b>
<b>COVARIANZA</b>	<b>1.8723</b>	<b>1.1404</b>	<b>0.1643</b>	<b>2.527</b>
<b>COEFICIENTE DE CORRELACIÓN DE PEARSON</b>	<b>0.870639062</b>	<b>0.440470664</b>	<b>0.142555347</b>	<b>0.630374977</b>

The main purpose of this research was to establish the incidence of the podcast in a sample of university students and its relationship with the achievement of situated learning through the dimensions: educational services, support, training, research and development and social inclusion. The data obtained show a significant correlation between the study variables, which is consistent with previous studies that indicate that the podcast is a resource that gives the opportunity to increase dialogical interactions between peers in a more relaxed and uninhibited space (Pardo, Suelves and Vidal, 2020).

The students highlighted in reference to the accompaniment variable that the podcast facilitated constant monitoring by the teacher during the academic cycle, guiding or moderating the comments, which reinforces the notion of Molina, Valencia and Suarez (2016) by indicating that the podcast has It has been perceived as a tool that has allowed the development of a different way regarding the construction of knowledge in the teacher-student relationship. There is widespread recognition among students that goals and learning are valuable to their present and future multimodal learning needs (Hourigan & Muray, 2010).

The greatest motivation of students for the use of podcast is that it provides new learning opportunities that they had to share resources and information. (Pardo, Suelves and Vidal, 2020). Molina, Valencia and Suarez (2016) who argue that although podcast are available 24 hours a day and this allows it to be adapted to personal learning circumstances, it will only be a support element if it is worked in collaboration. Podcasts help the educational act to be more democratic as it helps to bridge social, economic and cultural gaps (Dapia and Escudero, 2014).

## 5. Conclusions

It is concluded that there is a significant high correlation in the use of the podcast as a methodological tool in the achievement of learning situated in the University context. Finally, the results of this work should be disseminated, since to follow the rhythm of technology and adapt to social changes, to motivate and awaken the interest of our students, taking advantage of the advantages it offers to teaching-learning, since users they do not require advanced knowledge to use podcasts.

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